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EXAMINER

HUYNH, CONG LAC T

ART UNIT	PAPER NUMBER
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2178

DATE MAILED: 04/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/197,184

Applicant(s)

TERADA ET AL.

Examiner

Cong-Lac Huynh

Art Unit

2178

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 January 2004.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is responsive to communications: amendment filed on 1/20/04 to the application filed on 11/20/98, priority filed 12/2/97.
2. Claims 1-22 are pending in the case. Claims 1, 10, 14, 18 and 22 are independent claims.

Priority

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1-21 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Sato (JP-8-293039A, 11/5/96, filed 4/24/95) in view of Ohba (JP-3-216767A, 9/21/91, filed 1/21/90), the IDSs submitted by Applicants.

Regarding independent claim 1, Sato discloses:

- sequentially providing music control information in correspondence with the music to be played, the music control information including a plurality of types of music control event data for controlling a sound of music to be played (abstract: "it is possible to generate from music, images having definite shape and motion, such as the motion of a human dancing to the music"; [0002]: "the motion of sounds in each part of a music is made to correspond to the motion of images having basic shape"; [0006]: "*musical information is converted into a series of pieces of motion information by appropriately switching the motion at every point of sound buildup*", "motions of the articulated object are applied to the imageto display an animated image"; [0014]: the motions of limbs of the articulated object are stored in advance in the motion database and the chords are detected to match with the motion data stored in the motion database; [0033]: ".. As music information, signals corresponding to performance control information, such as MIDI control signals are inputted to the musical signal inputting section 101. The MIDI control signals have interval information and sound volume information for individual tones"; [0035]: "it is possible to convert the acoustic art, the *music*, into

specific visual art, *the motion of articulated object* having a definite shape, for example *the motion of a human dancing to the music*")

- generating the sound in accordance with each music control event data included in the music control information to thereby play the music ([0006]: a sound buildup point in accordance with the musical information and the motions of the animated image; the fact that the musical information is converted into a series of pieces of motion information by appropriate *switching the motion at every point of sound buildup* suggests generating the sound in accordance with the music control event data since the sound of music is built appropriately with for each motion of the animated image)
- controlling the movements of the respective movable parts in correspondence to the types of music control event data included in the music control information sequentially provided, thereby generating a motion image of the object in matching with progression of the music ([0014]: the motions of limbs of the articulated object is matched with the chord shows generating a motion image of the object in matching with progression of the music; [0015]: "an articulated object moving in time to the music may be displayed using the pre-stored motion data"; the fact that the music is matched with the pre-stored motions of an object shows the control of movements of respective movable part of an object to the music data)

Sato does not disclose explicitly:

- manually selecting a type of music control event data from among the plurality of types of the music control event data and setting the type of music control event data to each of the movable parts of the object such that the respective movable parts correspond to the types of music control event data selected and set by the parameter setting module

Ohba discloses:

- manually operable to select a type of music control event data from among the plurality of types of the music control event data and operable to set the type of music control event data to each of the movable parts of the object such that the respective movable parts correspond to the types of music control event data selected and set by the parameter setting module (pages 3 and 4: *using keyboard to generate a sound from a sound source via a key operation on the keyboard* for generating the parameters RQ, RR, and RS where parameter Q is associated with the motion of legs, parameter R is associated with the motion of arms, and parameter S is associated with the display position of the character, respectively (page 1) suggests *manually operable to select the music control*, actually the MIDI standard signals; generating the parameters associated with the motions of legs, arms and the position of the character corresponds to the MIDI signals, which are music control data, suggests setting the type of music control to each movable parts of the object to obtain the correspondence between the music and the motions of the animated object)

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have combined Ohba into Sato since Ohba provides manually selecting a type of music control event data by using the keyboard to select MIDI standard signals of music set for the motions of the movable parts of an object via the associated parameters providing the advantage to apply to Sato for easily controlling music data with the corresponding movement of parts of an animated object stored in the database.

Regarding claim 2, which is dependent on claim 1, Sato discloses preparing a frame of the motion image in advance to generation of the sound corresponding to the same data block to generate the prepared frame timely when generating the sound according to the same data block used for preparation of the frame (section [0014], ...chords detected with the chord detecting section are matched in advance with the motion data stored in the motion database..., motion output section visualizes to display the motion data generated...).

Sato does not disclose analyzing a block of the performance data to perform said preparing. However, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to have modified Sato to include analyzing a block of the performance data into Sato since the block of performance data is considered equivalent to the multimedia segment in Sato where the motion video segments, the time segments and the sound segments are generated to match with each other.

Regarding claim 3, which is dependent on claim 1, Sato discloses generating the key frames of the motion image in response to the music control information, and generating the sub frames inserted between the successive key frames by interpolation to smoothen the motion image ([0027]: generating M frames per one motion.....motion data for display are obtained by interpolating a motion data of m-th frame and a motion data of (m+1)th frame...generate motions according to the music)

Regarding claim 4, which is dependent on claim 1, Sato does not disclose generating the motion image of an object representing an instrument player and analyzing the audio control information to determine a rendition movement of the instrument player for controlling the motion image as if the instrument player plays the music.

Instead Sato discloses converting music into images by using the stored motions of an articulated object and the chord for generating the motion of a human dancing to the music (abstract; sections [0033] and [0035]).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have modified Sato to include that the motion object is an instrument player for performing the music since a music player is considered equivalent to a motion object with movable parts moving according to the music.

Regarding claim 5, which is dependent on claim 1, Sato does not disclose *determining the movement of the movable parts of the object*, generating the motion image according to the motion parameters, and resetting the motion image to revert the

movable parts to the default positions in matching with the progression of the music.

Instead Sato discloses the matching of motions of a human dancing to the music (abstract; [0005] and [0035]).

Ohba discloses generating the motion image according to the motion parameters (pages 1 and 2, parameter Q associated with the motions of legs, parameter R associated with the motions of arms, parameter S associated with the display position of the character...transform the shapes of respective parts of the character expressed with the shape data in response to the values of parameters Q, R, S).

Ohba does not disclose determining the movement of the movable parts of the object.

However, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to have modified Ohba to include "determining the movement ..."

for the following reason. "Generating the motion image" in Ohba inherently includes "determining the movement..." since the movements of movable parts of an object should be determined to generate a motion image of the object.

Also, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to have combined Ohba into Sata for facilitating the control of motions of an objects in accordance to the played music by using the set parameters for corresponding motions.

Regarding claim 6, which is dependent on claim 1, Sato discloses that the synchronization signal, *which is provided from the sequencer module* and which is

utilized to regulate a beat of music so that the motion image of the object is controlled in synchronization with the beat of the music (sections [0008] - [0011]).

Regarding claim 7, which is dependent on claim 1, Sato discloses the synchronization of the motion video and the music (abstract, sections [0027]-[0029]). However, Sato does not disclose providing the music control information containing event data specifying an instrument used to play the music.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have modified Sato to add specifying an instrument used to play the music since it was well known that a music must be played by an instrument or a combination of some instruments, and since the music control information is where to include information relating to playing the music.

Regarding claim 8, which is dependent on claim 1, Sato does not disclose *setting motion parameters effective to determine the movements of the movable parts of the object*.

Ohba discloses setting motion parameters effective to determine the movements of the movable parts of the object (page 2: parameter Q is stored for designating the motions of legs, parameter R is stored for designating the motions of arms, ...)

Ohba also discloses utilizing the motion parameters to control the motion image of the object (refer to claim 1).

Sato and Ohba do not disclose controlling the amplitude of the sound to further control the motion image such that the movement of each part determined by the motion parameter is scaled in association with the amplitude of the sound.

However, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to have modified Sato and Ohba to include controlling the amplitude of the sound to further control the motion image such that the movement of each part determined by the motion parameter is scaled in association with the amplitude of the sound because of the following reason. The amplitude of the sound can be controlled by adjusting the volume of the sound. Since the movement of the part of the object is determined by a motion parameter, said movement is synchronized with the music, and the amplitude of the sound can be adjusted, these features suggest to synchronize the movement of the motion images with the sound in a way that the motion images are adjusted to match with the up and down of the sound. In other words, the motion images are scaled in association with the amplitude of the sound.

Regarding claim 9, which is dependent on claim 1, as mentioned in claim 6, Sato discloses that the dancer object, which is a motion object, and the music are synchronized (abstract, [0035]). Ohba discloses the motion parameters correspondent to the movements of a motion object (pages 1-2).

Sato does not disclose explicitly that the synchronization signal is provided from the sequencer module. However, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to have modified Sato to include a sequencer

module since Sato's disclosure of synchronizing the motions of a dancer object to the music suggests such module in Sato for performing the function.

Claims 10-13 are for an apparatus of claims 1-4, and therefore are rejected under the same rationale.

Regarding independent claim 14, Sato discloses:

- sequentially providing performance data to perform the music, the performance data including a plurality of types of MIDI event data associated with the music to be played (abstract: "it is possible to generate from music, images having definite shape and motion, such as the motion of a human dancing to the music"; [0002]: "the motion of sounds in each part of a music is made to correspond to the motion of images having basic shape"; [0006]: "*musical information is converted into a series of pieces of motion information by appropriately switching the motion at every point of sound buildup*", "motions of the articulated object are applied to the imageto display an animated image"; [0014]: the motions of limbs of the articulated object are stored in advance in the motion database and the chords are detected to match with the motion data stored in the motion database; [0033]: "... As music information, signals corresponding to performance control information, such as MIDI control signals are inputted to the musical signal inputting section 101. The MIDI control signals have interval information and sound volume information for individual tones"; [0035]: "it is possible to

convert the acoustic art, the *music*, into specific visual art, *the motion of articulated object* having a definite shape, for example *the motion of a human dancing to the music*")

- generating a sound in accordance with the performance data to thereby perform the music (section [0006], a sound buildup point in accordance with the musical information and the motions of the animated image)
- generating a motion image of the object in matching with the progression of the music, wherein the step of generating a motion image is in response to the performance data for controlling movements of the respective movable parts in correspondence to the types of MIDI event data included in the performance data sequentially provided by said step of sequentially providing performance data (sections [0014] and [0015], the motions of limbs of the articulated object are matched with the chord; section [0005], generating timing to switch the motion of the articulated object from musical signal, detecting chord from musical signals, and selecting motions from motion database based on the chords in time to the timing to switch the motion)

Sato does not disclose explicitly selecting and setting the types of MIDI event data to the movable parts of the object such that the respective movable parts correspond to the types of the MIDI event data selected and set.

Ohba discloses selecting and setting the types of MIDI event data to the movable parts of the object such that the respective movable parts correspond to the types of the MIDI event data selected and set (pages 1 and 2, Summary of the Invention and

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Embodiment: producing an animation of the object accordingly to the MIDI signal, and the motion of legs and the motion of arms show the movable parts of the objects according to the MIDI signal; page 4: the fact that the parameters RQ, RR, and RS generated to designate the transformation of input images according to the MIDI signals indicates that the types of MIDI data to the movable parts – the legs and the arms – are set and selected via the parameters showing the movement of the parts of the object). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have combined Ohba into Sato to facilitate reproducing a motion object where the movement of the object is synchronized with the sound of the music via selecting the set MIDI event data to the movable parts of the objects to obtain a desired output where MIDI signals are synchronized with the transformation of the input image, which is the movement of the parts of the object.

Regarding claim 15, which is dependent on claim 14, Sato discloses:

- generating a sound in response to the timing signal and in accordance with the performance data to thereby perform the music (section [0006], a sound buildup point in accordance with the musical information and the motions of the animated image)
- generating a motion image of the object to response to the timing signal to matching with the progression of the music (section [0005], generating timing to switch the motion of the articulated object from musical signal, detecting chord

from musical signals, and selecting motions from motion database based on the chords in time to the timing to switch the motion)

- preparing a frame of the motion image in advance to generation of the sound corresponding to the motion image so that the prepared frame can be generated timely when the sound is generated according to the same block used for preparation of the frame (section [0014], motions of limbs of the articulated object are stored in advance in the motion database, and the kinds of chords detected are matched in advance with the motion data stored in the motion database)

Sato does not disclose analyzing a block of the performance data to perform said preparing. However, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to have modified Sato to include analyzing a block of the performance data into Sato since the block of performance data is considered equivalent to the multimedia segment in Sato where the motion video segments, the time segments and the sound segments are generated to match with each other.

Regarding claim 16, which is dependent on claim 14, Sato discloses generating the key frames of the motion image in response to the synchronization signal according to the motion parameters and the music control information, and generating the sub frames inserted between the successive key frames by interpolation to smoothen the motion image (section [0027], generating M frames per one motion.....motion data for display are obtained by interpolating a motion data of m-th frame and a motion data of (m+1)th frame...generate motions according to the music).

Regarding claim 17, which is dependent on claim 14, as mentioned in claim 14, Sato does not disclose providing motion parameters to design a movement of the object representing a player of an instrument, and wherein the step of generating a motion image comprises utilizing the motion parameters to form the framework of the motion image of the player and utilizing the performance data to modify the framework for generating the motion image presenting the player playing the instrument to perform the music.

Instead, Sato discloses converting music into images by using the stored motions of an articulated object and the chord for generating the motion of a human dancing to the music (abstract; [0033], [0035]).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have modified Sato to include that the motion object is an instrument player for performing the music since a music player is considered equivalent to a motion object with movable parts moving according to the music.

Claims 18-21 are for a machine readable medium of claims 1-4, and therefore are rejected under the same rationale.

7. Claim 22 remains rejected under 35 U.S.C. 103(a) as being unpatentable over Sato (JP-8-293039A, 11/5/96, filed 4/24/95) in view of Ohba (JP-3-216767A, 9/21/91, filed 1/21/90), the IDSs submitted by Applicants.

Regarding independent claim 22, Sato discloses:

- providing music control information in correspondence with the music to be played such that the music control information is arranged into a plurality of sections correspondent to the movable parts of an animated object (abstract: "it is possible to generate from music, images having definite shape and motion, such as the motion of a human dancing to the music"; [0002]: "the motion of sounds in each part of a music is made to correspond to the motion of images having basic shape"; [0006]: "*musical information is converted into a series of pieces of motion information* by appropriately switching the motion at every point of sound buildup", "motions of the articulated object are applied to the imageto display an animated image"; [0014]: the motions of limbs of the articulated object are stored in advance in the motion database and the *chords are detected to match with the motion data stored in the motion database*; [0035]: "it is possible to convert the acoustic art, the *music*, into specific visual art, *the motion of articulated object* having a definite shape, for example *the motion of a human dancing to the music*")
- generating a sound in accordance with the music control information to thereby play the music ([0006]: a sound buildup point in accordance with the musical information and the motions of the animated image)
- generating a motion image of the object in matching with progression of the music ([0014]: the motions of limbs of the articulated object is matched with the

chord; [0015]: “an articulated object moving in time to the music may be displayed using the pre-stored motion data”)

- controlling movements of the respective movable parts in correspondence to the channels of the music control information sequentially provided from the sequencer module, thereby generating a motion image of the object in matching with progression of the music ([0014]: the motions of limbs of the articulated object is matched with the chord; [0015]: “an articulated object moving in time to the music may be displayed using the pre-stored motion data”; the fact that the music is matched with the pre-stored motions of an object shows the control of movements of respective movable parts of an object to the music data)

Sato does not disclose:

- manually operable to select a channel of the music control information from among the plurality of the channels and operable to set the selected channel of the music control information to each of the movable parts of the objects such that the respective movable parts correspond to the channels of the selected and set music control information

Ohba discloses:

- manually operable to select a type of music control event data from among the plurality of types of the music control event data and operable to set the type of music control event data to each of the movable parts of the object such that the respective movable parts correspond to the types of music control event data selected and set by the parameter setting module (pages 3 and 4: *using*

keyboard to generate a sound from a sound source via a key operation on the keyboard for generating the parameters RQ, RR, and RS where parameter Q is associated with the motion of legs, parameter R is associated with the motion of arms, and parameter S is associated with the display position of the character, respectively (page 1) suggests *manually operable to select the music control*, actually the MIDI standard signals; generating the parameters associated with the motions of legs, arms and the position of the character corresponds to the MIDI signals, which are music control data, suggests setting the type of music control to each movable parts of the object to obtain the correspondence between the music and the motions of the animated object)

- controlling the movements of respective movable parts in correspondence to the types of event data contained in the music control in correspondence to the types of event data contained in the music control information sequentially provided (page 2: the motions of legs and the motions of arms are generated with correspondent parameters; page 3: the shape of the arm of the character is transformed so that the character may move the arms; the shapes of the legs and the arms are synthesized to form the entire configuration of character for outputting the animation; a filter is formed to detect musical scale, stress and length of the synthesized sound based on the MIDI signal to generate the parameters RQ, RR, and RS correspondent to the change of the arms and legs of the animated object according to the music)

Ohba does not mention the channel of music control information. However, as mentioned above, Ohba suggests selecting and setting music control information to the movable parts of an animated object. Since in Ohba, each music control signal selected corresponds to a movement of the parts of an animated object, Ohba suggests a channel of music control information designated for a particular moving part of an animated object.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have combined Ohba into Sato since Ohba provides manually selecting a type of music control event data by using the keyboard to select MIDI standard signals of music set for the motions of the movable parts of an object via the associated parameters providing the advantage to apply to Sato for easily controlling music data with the corresponding movement of parts of an animated object stored in the database.

Response to Arguments

8. Applicant's arguments filed 1/20/04 have been fully considered but they are not persuasive.

Applicants argue that neither Sato nor Ohba contain any disclosure or suggestion of providing music control data containing multiple types of event data whereby different types of event data is selected and designated to correspond with different movable parts of an animated object. The reason for that is *Sato simply uses MIDI data to generate music, detects the volume, pitch, peaks, and chords of the generated musical signal to generate a motion image while the motion image is not generated or controlled*

by MIDI data. Ohba fails to disclose selecting and setting specific type of music control event data to trigger a corresponding movement by a particular moving part of an animated object. Also, the stored parameters Q, R, S in Ohba are used to designate timing points on a timing axis for displaying one of the pre-stored shape images at those time axis. These parameters Q, R, S are time-indicating parameter data, and not music control event data (Remarks, pages 11-12).

Examiner respectfully disagrees.

Sato uses MIDI data to generate music. Sato detects the volume, pitch, and chords of the generated musical signals to generate a motion image. Therefore, it was obvious that the motion image must be generated by the MIDI data since the musical signals used for generating the motion image are actually the MIDI data.

The stored parameters Q, R, S are associated with the motions of the legs, arms, and the position of the character and are sequentially allocated to time axes (pages 1-2).

These parameters are used to designate the motions of legs, arms and the positions of the characters displayed on the monitor (page 2). These parameters Q, R, S are not music control event data and time-indicating parameter data as argued. Instead, the MIDI signals corresponding to the movements of the legs or the arms designated by parameters Q, R, S are music control event data.

Applicants also argue that neither Sato nor Ohba contain any disclosure of selecting, via a parameter setting module (such as a graphical user interface illustrated in Fig. 7), a

type of music control event data from a plurality of music control event data for corresponding to a movable part of the animated object (Remarks, page 13).

Examiner respectfully disagrees.

Ohba discloses using the keyboard for selecting a sound from a source of MIDI signals (page 3: the synthesized sound is generated in response to the key operation of the keyboard indicates selecting a key on the keyboard, which supplies a sound source of MIDI signals, for a desired sound). When the player plays the keyboard, the image converting and processing apparatus transforms the shape of the character stored in the input image on the basis of the synthesized parameters Q, R, S (page 3). This shows selecting a type of music control event data, via MIDI signals, for the corresponding movable parts of the animated object. Since a graphical user interface as illustrated in Fig.7 for a parameter setting module is not claimed, a parameter setting module can be interpreted in any way. Ohba provides selecting MIDI signals for corresponding movements of the parts (legs or arms) of an animated object. Ohba, therefore, inherently includes a parameter setting module defined in programming for performing said selecting.

Regarding independent claim 22, Applicants argue that none of the cited references, including Sato and Ohba, contains any disclosure or suggestion of selecting and setting a channel of music control information from a plurality of channels using a parameter setting module where one particular channel can be designated for a particular moving part of an animated object (Remarks, page 13).

Examiner agrees that Ohba does not mention the channel of music control information. However, as mentioned above, Ohba suggests selecting and setting music control information to the movable parts of an animated object. Since in Ohba, each music control signal selected corresponds to a movement of the parts of an animated object, Ohba suggests a channel of music control information designated for a particular moving part of an animated object.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kennedy (US Pat No. 5,690,496, 11/25/97).

Hutchings (US Pat No. 5,359,341, 10/25/94).


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cong-Lac Huynh whose telephone number is 703-305-0432. The examiner can normally be reached on Mon-Fri (8:30-6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Herndon can be reached on 703-308-5186. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Clh
4/1/04


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